

State of Maine Department of Marine Resources

Information Sheet on Finfish Aquaculture Therapeutant Use

Only USFDA approved therapeutants are permitted for use in aquaculture. There are a number of approved new animal drugs (ANAD) marketed under different brand names. The only compounds approved for use on species raised in Maine are:

Compound	Brand names	Type
Tricaine methanesulfonate	Finquel	Anesthetic
Formalin	Formalin-F; Paracide-F; Parasite-S	Fungicide; control of external trematodes
Sulfadimeth-oxine and ormetoprim	Romet 30	Antibiotic
Oxytetracycline	Terramycin (TM-100)	Antibiotic

Smolts are vaccinated at the hatcheries for several common infections that were once treated only by antibiotics when fish were in the net pens.

All medications in aquaculture require a veterinarian's prescription and must be prescribed to treat a specific condition or disease. They are not used as growth promoters.

Oxytetracycline has a 30-day withdrawal period (time from last dose before product can be marketed), and Emamectin benzoate has a 60-day withdrawal period per FDA regulations. Both are administered orally through specially formulated feed.

Public notice (posting on the cages) is required whenever therapeutants are in use. Sediments are analyzed for therapeutant residues.

Two sea lice treatments are (or were) used under the investigational new animal drug program (INAD). Cypermethrin was used from 1998-2001. Its manufacturer pulled it from the U.S. market. Slice (Emamectin benzoate) replaced cypermethrin in 2002. Total amount of therapeutic usage at Maine farms in the years 2001 and 2002 is below. Figures for 2003 are not yet available.

	2001	2002	2003
	~8.7 million fish	~8.2 million fish	~4.5 million fish
Compound	(Amount of active ingredient)		
Oxytetracycline	349.0 kg	6.7 kg	
Emamectin benzoate	0.59 kg	1.12 kg	
Cypermethrin	778 liters	none	
Sulfadimeth-oxine and ormetoprim	none	none	
Formalin	none	none	